OPERATING & MAINTENANCE MANUAL
WASCOMAT JUNIOR W 75
WASCOMAT SUPER JUNIOR W 105
WASCOMAT SENIOR W 125
WASCOMAT GIANT W 185

471 1562-74/01
97.43

WARNING: ALL OPERATING AND MAINTENANCE PROCEDURES SHOWN ON THE NEXT PAGE OF THIS MANUAL MUST BE FOLLOWED DAILY FOR PROPER OPERATION OF YOUR WASCOMAT MACHINE.

PLEASE ENTER THE FOLLOWING INFORMATION AS IT APPEARS ON THE MACHINE(S) DATA PLATE(S).

MACHINE TYPE OR MODEL	
MACHINE SERIAL NUMBER(S)	
ELECTRICAL CHARACTERISTICS: _____ VOLTS, _____ PHASE, _____ HZ.	

MAKE CERTAIN TO KEEP THIS MANUAL IN A SECURE PLACE FOR FUTURE REFERENCE.

NOTICE TO: OWNERS, OPERATORS AND DEALERS OF WASCOMAT MACHINES

IMPROPER INSTALLATION AND INADEQUATE MAINTENANCE, POOR HOUSEKEEPING AND WILLFUL NEGLECT OR BYPASSING OF SAFETY DEVICES MAY RESULT IN SERIOUS ACCIDENTS OR INJURY. TO ASSURE THE SAFETY OF CUSTOMERS AND/OR OPERATORS OF YOUR MACHINE, THE FOLLOWING MAINTENANCE CHECKS MUST BE PERFORMED ON A DAILY BASIS.

1. Prior to operation of the machine, check to make certain that all operating instructions and warning signs are affixed to the machine and legible. (See the following page of this manual for description and location of the signs.) Missing or illegible ones must be replaced immediately. Be sure you have spare signs and labels available at all times. These can be obtained from your dealer or Wascomat.

2. Check the door safety interlock, as follows:

   (a) OPEN THE DOOR of the machine and attempt to start in the normal manner:

   For coin-operated models, insert the proper coins to start the machine.

   For manually operated models, place the ON-OFF switch in the ON position and press the Start switch.

   For FL and EX models, insert a program card, turn the starter knob to the Start position and place the ON-OFF switch in the ON position.

   For HI-TEK microprocessor models, turn the key switch to the RUN position, choose a program and press the START button.

   For SELECTA 28 models, select a wash program and press the Start button.

   THE MACHINE(S) SHOULD NOT START !

   (b) CLOSE THE DOOR to start machine operation and, while it is operating, attempt to open the door without exerting extreme force on the door handle. The door should remain locked!

   If the machine can start with the door open, or can continue to operate with the door unlocked, the door interlock is no longer operating properly. The machine must be placed out of order and the interlock immediately replaced.
   (See the door interlock section of the manual.)

3. DO NOT UNDER ANY CIRCUMSTANCES ATTEMPT TO BYPASS OR REWIRE ANY OF THE MACHINE SAFETY DEVICES AS THIS CAN RESULT IN SERIOUS ACCIDENTS.

4. **Be sure to keep the machine(s) in proper working order**: Follow **all** maintenance and safety procedures. Further information regarding machine safety, service and parts can be obtained from your dealer or from Wascomat through its Teletech Service Telephone - 516/ 371-0700.

All requests for assistance must include the model, serial number and electrical characteristics as they appear on the machine identification plate. Insert this information in the space provided on the previous page of this manual.

5. **WARNING**: DO NOT OPERATE MACHINE(S) WITH SAFETY DEVICES BYPASSED, REWIRED OR INOPERATIVE! DO NOT OPEN MACHINE DOOR UNTIL DRUM HAS STOPPED ROTATING!

SAFETY AND WARNINGS SIGNS

Replace If Missing Or Illegible

One or more of these signs must be affixed on each machine as indicated, when not included as part of the front instruction panel.

LOCATED ON THE OPERATING INSTRUCTION SIGN OF THE MACHINE:

CAUTION

1. Do not open washer door until cycle is completed, operating light is off, and wash cylinder has stopped rotating.
2. Do not tamper with the door safety switch or door lock.
3. Do not attempt to open door or place hands into washer to remove or add clothes during operation. This can cause serious injury.

MACHINE SHOULD NOT BE USED BY CHILDREN

PRECAUCION

1. No abra la puerta de la máquina lavadora sino hasta que la máquina haya terminado su ciclo, la luz operativa esté apaga da y el cilindro de lavado haya completamento terminado de girar.
2. No interferia o manipule el switch o la cerradura de la puerta.
3. No trate de abrir la puerta o meta las manos dentro de la máquina para meter o sacar ropa mientras la máquina está en operación, pues puede resultar seriamento herido.

LAS MÁQUINAS NO DEBEN SER USADAS POR NIÑOS

LOCATED AT THE REAR OF THE MACHINE:

INSTALLATION AND MAINTENANCE WARNINGS

1. **This machine MUST be securely bolted to an uncovered concrete floor, according to the installation instructions, to reduce the risk of fire and to prevent serious injury, or damage to the machine.**
2. **If installed on a floor of combustible material, the floor area below this machine must be covered by a metal sheet extending to the outer edges of the machine.**
3. **This machine MUST be connected to a dedicated electrical circuit to which no other lighting unit or general purpose receptacle is connected. Use copper conductor only.**
4. **This machine MUST be serviced and operated in compliance with manufacturer's instructions. CHECK DOOR LOCKS EVERY DAY FOR PROPER OPERATION TO PRE VENT INJURY OR DAMAGE. IF THE DOOR LOCK FAILS TO OPERATE PROPERLY, PLACE THE MACHINE OUT OF ORDER UNTIL THE PROBLEM IS CORRECTED.**
5. **Disconnect power prior to servicing of machine.**
6. **To remove the top panel for service on those models on which it is secured by screws at the rear, first remove the screws. Be certain to reinstall them when remounting the top panel. To remove the top panel for service on those models on which it is secured by one or two keylocks, use the keys originally shipped in the drum package. Be certain to relock after remounting the top panel.**

MANUFACTURED BY WASCATOR
DISTRIBUTED BY WASCOMAT INWOOD, NEW YORK, USA

471 76 62 02

LOCATED ON THE DOOR:

If you need to order more safety or warning signs, call Wascomat's parts department at 516-371-2000, or call your local dealer.

WARNING !

DO NOT ATTEMPT TO OPEN DOOR
UNTIL PROGRAM HAS FINISHED AND
DRUM HAS STOPPED ROTATING.

471 7651-17

Wascomat Junior W 75 • Wascomat Super Junior W 105
Wascomat Senior W 125 • Wascomat Giant W 185

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The manufacturer reservs the right to make changes to design and material specifications.

Safety instructions

- **The machine is designed for water washing only.**
- **The machine must not be used by children.**
- **All installation operations are to be carried out by qualified personnel. Licensed personnel are necessary for all electric power wiring.**
- **The interlock of the door must be checked daily for proper operation and must not be bypased.**
- **All seepage in the system, due to faulty gaskets etc., must be repaired immediately.**
- **All service personnel must be fully familiar with the operating manual before attempting any repair or maintenance of the machine.**
- **The machine must not be sprayed with water, otherwise short circuiting may occur.**
- **Fabrics softener with volatile or inflammable fluids are not to be used in the machine.**

Introduction

Fig. 1 The Wascomat Junior, Super Junior, Senior and Giant models washer/extractors have been developed to cover the heavy duty and various size requirements of coin laundries, apartment houses, hotels, motels, nursing homes, hospitals, professional laundries, restaurants, schools, colleges and all on-premises laundries where high quality automatic washing and quick formula variation are required.

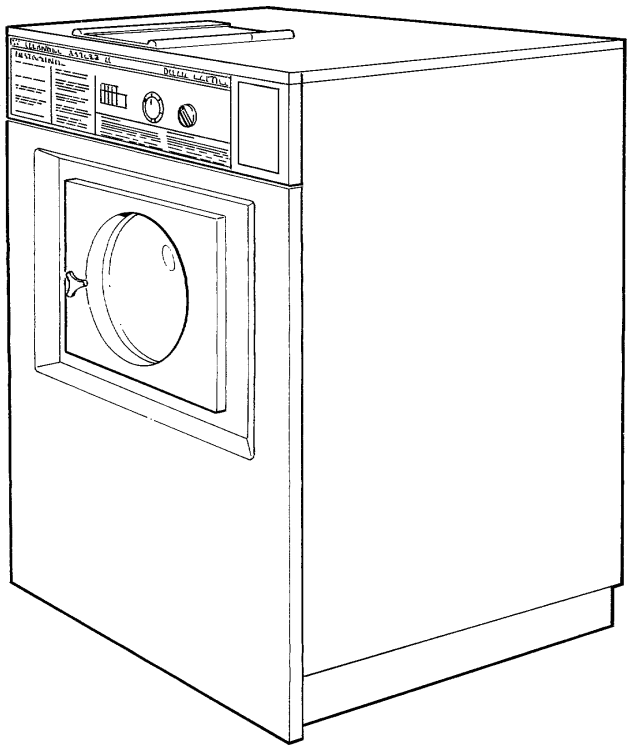
The W models offer four pre-set wash programs Hot, Warm, Cold and Permanent Press which can be selected by turning the rotary program selector on the front panel. These programs are designed to suit a variety of fabrics and offer different water temperature programs. The machine is designed for connection to hot and cold water supplies.

All parts of the machine which come into contact with the items being washed are made of heavy gauge surgical stainless steel, ensuring long life and lasting beauty, as well as full protection for no-iron fabrics. All electrical components are made accessible for servicing by simply removing the top panel.

This manual contains a technical description of the Wascomat W75, W105, W125 and W185 model machines and instructions for their installation, operation and maintenance. Together with the wiring diagram which accompanies each individual machine it should be kept in a safe place for easy reference.

When ordering spare parts always give the machine serial number, model, voltage and other electrical characteristics appearing on the nameplate at the rear of the machine.

1



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Technical data Wascomat Junior W75

Dry load capacity	up to	7.5 kg	18 lbs
Overall dimensions	Width	660 mm	26 in
	Depth	649 mm	25 9/16 in
	Height	1050 mm	41 11/32 in
	Net weight	107 kg	235 lbs
	Dyn force	1.2±2.6 kN	290±620 lbs. force
Crated dimensions	Volume	0.62 m^3	21.9 cu.ft
	Weight	117 kg	257 lbs
Inner drum	Diameter	520 mm	20 1/2 in
	Depth	356 mm	14 in
	Volume	75 litre	2.7 cu.ft
Speed of rotation	Wash		54 r.p.m.
	Extraction		543 r.p.m.
G-factor	During wash		0.8
	During extraction		90
Motor speed	During wash		344 r.p.m.
	During extraction		3514 r.p.m.
Voltage requirements	Choice:		
	120 V 1-phase 60 Hz		
	or		
	208-240 V 3-Phase 60 Hz		
Rated output power	Motor, wash, 3-phase		110 W
			0.15 HP
	Motor, extract., 3-phase		550 W
			0.75 HP
	Motor, wash, 1-phase		110 W
			0.15 HP
	Motor, extract., 1-phase		370 W
			0.5 HP

Water connections

Recommended water pressure	2-6 kp/cm^2	25-85 psi
Hose connection, water	20 DN	3/4 in
Hose connection, drain	74 mm	3 in

Technical data Wascomat Super Junior W105

Dry load capacity	up to	10 kg	25 lbs
Overall dimensions	Width	660 mm	26 in
	Depth	766 mm	30 5/32 in
	Height	1050 mm	41 11/32 in
	Net weight	147 kg	323 lbs
	Dyn force	1.7 ±3.4 kN	408±816 lbs. force
Crated dimensions	Volume	0.65 m^3	23.0 cu.ft.
	Weight	158 kg	348 lbs
Inner drum	Diameter	520 mm	20 1/2 in
	Depth	473 mm	18 5/8 in
	Volume	100 litre	3.6 cu.ft
Speed of rotation	Wash		54 r.p.m.
	Extraction		543 r.p.m.
G-factor	During wash		0.8
	During extraction		90
Motor speed	During wash		344 r.p.m.
	During extraction		3514 r.p.m.
Voltage requirements	Choice:		
	120 V 1-phase 60 Hz		
	or		
	208-240 V 3-Phase 60 Hz		
Rated output power	Motor, wash 3-phase		150 W
			0.2 HP
	Motor, extract. 3-phase		900 W
			1.2 HP
	Motor, wash 1-phase		140 W
			0.18 HP
	Motor, extract. 1-phase		550 W
			0.75 HP

Water connections

Recommended water pressure	2-6 kp/cm^2	25-85 psi
Hose connection, water	20 DN	3/4"
Hose connection, drain	74 mm	3"

Technical data Wascomat Senior W125

Dry load capacity	up to	16 kg	35 lbs
Overall dimensions	Width	745 mm	29 11/32 in
	Depth	995 mm	39 in
	Height	1196 mm	47 3/32 in
	Net weight	210 kg	462 lbs
	Dyn force	2.4±4.8 kN	576±1152 lbs. force
Crated dimensions	Volume	1.06 m^3	39 cu.ft.
	Weight	222 kg	489 lbs
Inner drum	Diameter	620 mm	24 1/2 in
	Depth	520 mm	20 1/2 in
	Volume	157 litre	5.65 cu.ft
Speed of rotation	Wash		52 r.p.m.
	Extraction		500 r.p.m.
G-factor	During wash		0.9
	During extraction		87
Motor speed	During wash		330 r.p.m
	During extraction		3450 r.p.m
Voltage requirements	Choice:		
	208-240 V 1-phase 60 Hz		
	or		
	208-240 V 3-Phase 60 Hz		
Rated output power	Motor, wash 3-phase		300 W
			0.4 HP
	Motor, extract. 3-phase		1300 W
			1.8 HP
	Motor, wash 1-phase		270 W
			0.45 HP
	Motor, extract. 1-phase		1500 W
			2,0 HP

Water connections

Recommended water pressure	2-6 kp/cm^2	25-85 psi
Hose connection, water	20 DN	3/4"
Hose connection, drain	74 mm	3"

Technical data Wascomat Giant W 185

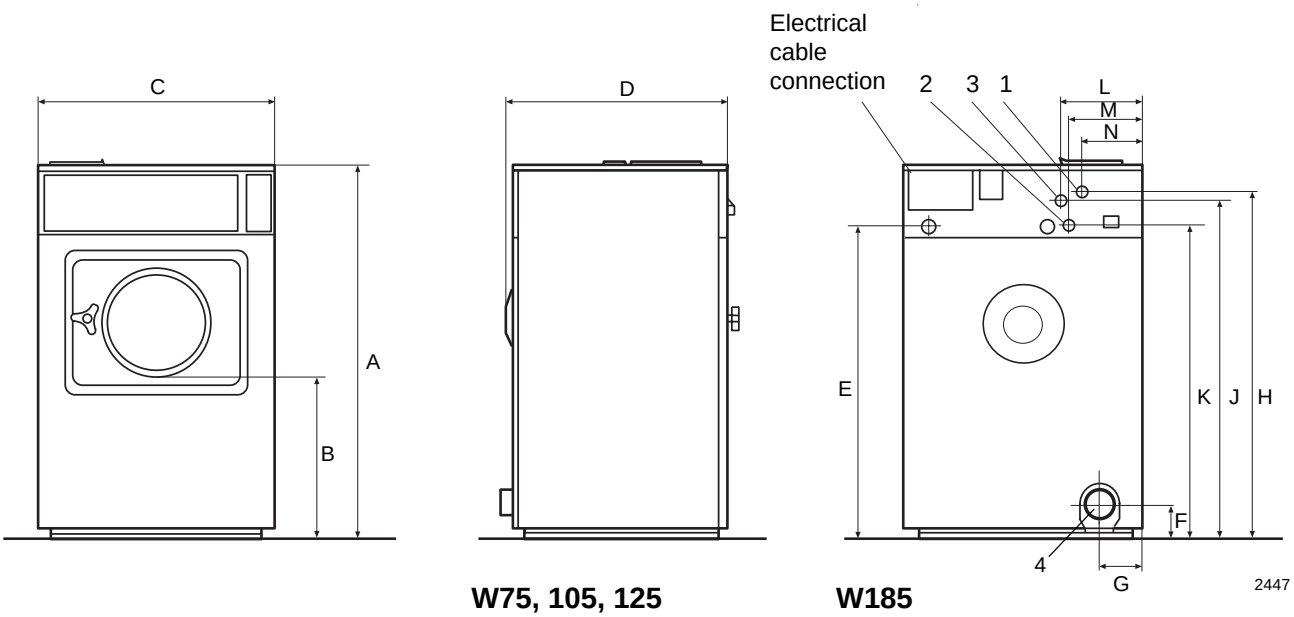
Dry load capacity	up to	23 kg	51 lbs
Overall dimensions	Width	827 mm	32 5/8 in
	Depth	1085 mm	42 3/4 in
	Height	1315 mm	51 3/4 in
	Net weight	264 kg	582 lbs
	Dyn force	3.1±5.2 kN	744±1248 lbs. force
Crated dimensions	Volume	1.42 m^3	50.2 cu.ft.
	Weight	275 kg	606 lbs
Inner drum	Diameter	700 mm	27 9/16 in
	Depth	600 mm	23 5/8 in
	Volume	230 litre	8.1 cu.ft
Speed of rotation	Wash		45 r.p.m.
	Extraction		455 r.p.m.
G-factor	During wash		0.8
	During extraction		81
Motor speed	During wash		360 r.p.m
	During extraction		3480 r.p.m
Voltage requirements	Choice:		
	208-240 V 1-phase 60 Hz		
	or		
	208-240 V 3-Phase 60 Hz		
Rated output power	Motor, wash 3-phase		400 W
			0.55 HP
	Motor, extract. 3-phase		2000 W
			2.7 HP
	Motor, wash 1-phase		400 W
			0.55 HP
	Motor, extract. 1-phase		1800 W
			2.4 HP

Water connections

Recommended water pressure	2-6 kp/cm^2	25-85 psi
Hose connection, water	20 DN	3/4"
Hose connection, drain	74 mm	3"

Technical data

Outline and dimensions



W75, 105, 125

1 Cold water
2 Hot water

W185

1 Cold water
2 Hot water
3 Hot water

	W75		W105		W125		W185	
	mm	inches	mm	inches	mm	inches	mm	inches
A	1050	41 11/32	1050	41 11/32	1196	47 3/32	1315	51 3/4
B	437	17 7/32	437	17 7/32	465	18 5/16	540	21 1/4
C	660	26	660	26	775	30 1/2	860	33 27/32
D	678	26 3/4	795	31 10/32	995	39 3/16	1085	42 11/16
E	895	35	895	35	1040	41	1160	45 3/4
F	100	3 15/16	100	3 15/16	100	3 15/16	100	3 15/16
G	125	4 15/16	125	4 15/16	270	10 5/8	260	10 1/4
H	980	38 1/2	980	38 1/2	1130	44 1/2	1250	49 7/32
J	–	–	–	–	–	–	1230	48 7/16
K	890	35	890	35	1035	40 3/4	1155	45 1/2
L	–	–	–	–	–	–	225	8 7/8
M	205	8	205	8	205	8	205	8
N	160	6 5/16	160	6 5/16	160	6 5/16	160	6 5/16

Installation

Machine foundation

The machines are designed to be bolted in position to a concrete floor or specially prepared concrete foundation. A template showing the size of the foundation and positioning of the foundation bolts is delivered with each machine.

For installation on an existing concrete floor, the floor must be at least 8" thick and of good quality. If the floor does not meet these requirements, then a 6-8" high concrete foundation should be made. A prefabricated steel base is available for mounting of machines without an additional foundation.

Follow the instructions below when making a concrete foundation:

Fig. (2) 1. Decide where to place the machine and consider maintenance requirements, i.e. determine a suitable distance from the rear of the foundation to the wall, and the distance from the foundation to the nearest side wall. The distance should be at least 16 and 12 inches, respectively.

Fig. (3) 2. Break up the floor to a depth of 3 inches, making sure that the sides of the hole slope inwards - the bottom of the hole should be 5 inches longer than the upper length.

3. Wet the hole well. Brush the bottom and sides with cement grout.

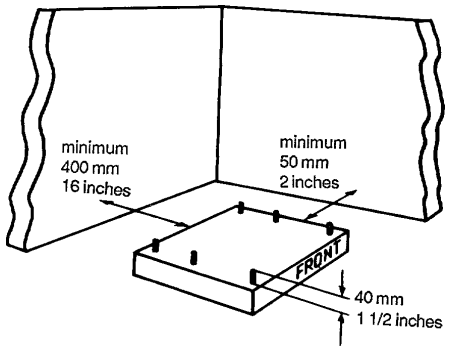
Fig. (4) 4. Prepare a casing and fill with concrete to form foundation. Make sure the foundation is level.

5. Use the template to position the foundation bolts correctly - bolts are to extend 1 1/2" above concrete.

   NOTE: A prefabricated steel frame, designed to be placed in the concrete instead of the individual mounting bolts, is available.

	W75		W105		W125		W185	
	mm	inches	mm	inches	mm	inches	mm	inches
A	364	14 11/32	481	18 15/16	508	20	600	23 2/3
B	593	23 11/32	710	27 15/16	910	35 13/16	960	37 3/4
C	635	25	747	29 13/32	950	37 13/32	1000	39 3/8
D	87	3 7/16	87	3 7/16	102	4	102	4
E	530	20 7/8	530	20 7/8	600	23 5/8	700	27 9/16
F	660	26	660	26	745	29 11/32	827	32 5/8
G	700	27 9/16	700	27 9/16	800	31 1/2	880	34 2/3
H	643	25 5/16	715,6	28 3/16	786	30 15/16	922	36 1/8
I	-	-	-	-	991	39	1090	42 7/8
K	-	-	-	-	281	11	236	9 7/16

2



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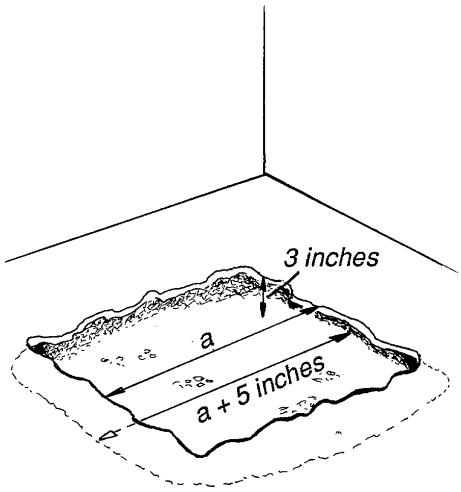

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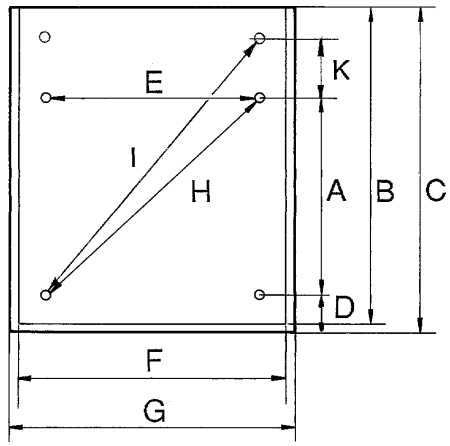

F = machine
G = foundation

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Mechanical installation

Fig. 5

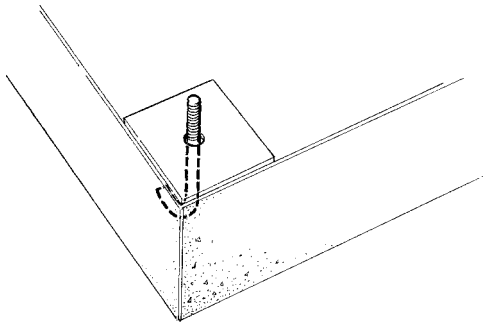
- Place wide steel shims on the concrete foundation over the bolts.
- Lift the machine and lower it in position. Never use the door or the door handle to lift or lower the machine.
- Check that the machine is level front-to-rear and side-to-side and standing firmly on the four (W75, W105) or six (W125 W185) supporting points. Spacing washers must be mounted if one or more of these points is not resting against the floor/foundation.

Fig. 6

Fig. 7

- Place flat washers over the foundation bolts and secure the machine in position by tightening the self-locking nuts. See illustration below.
- Check and tighten the nuts every week for the first month.

5



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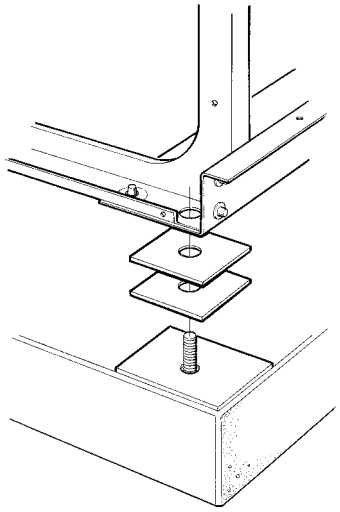

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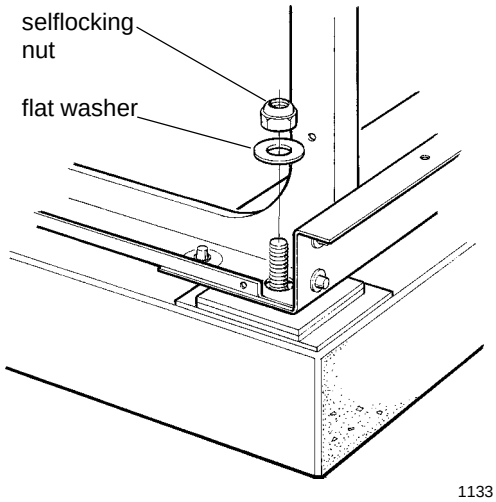

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Electrical installation

Although the machines are fitted with a thermal overload in the motor windings a separate three-phase common-trip circuit breaker must be installed for all three-phase machines.

Fig. 8

For proper overcurrent protection, check the data plate at the rear of the machine. Also consult local electrical code for special requirements.

Connect L1, L2, L3 and ground wires according to the markings of the terminal block. The cable is to hang in a large loose loop, supported by the clip of the terminal block.

Fig. 9

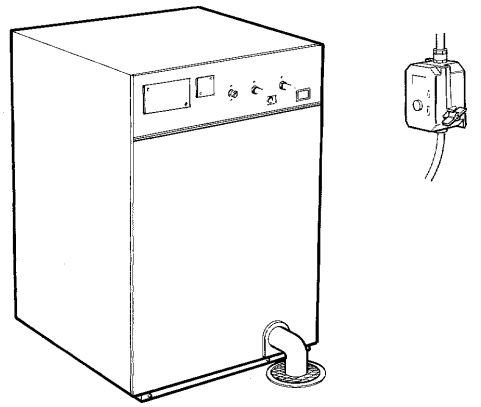
After installation, do the following for 3-phase machines:

Check the incoming power for a high voltage leg. If present, connect that line to L2 on the terminal block.

Start the machine and check that the drum rotates in the proper direction during extraction, i.e. counter-clockwise when seen from the front. If the drum rotates in the wrong direction inter-charge line L1 and L3 at the power connection terminal.

Fig. 10

8



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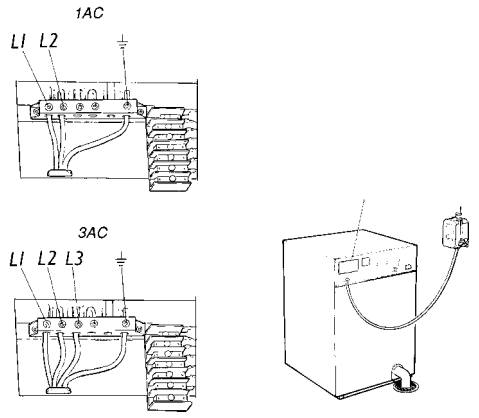

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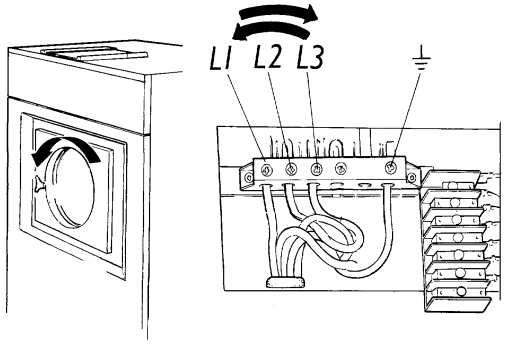

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Water connection

NOTE

All plumbing must conform to national and local plumbing codes.

Incoming water lines do not require non-return or back-suction valves, as the machine is already fitted with a siphon breaker. However, all incoming lines must be fitted with shut-off valves.

Fig. 11

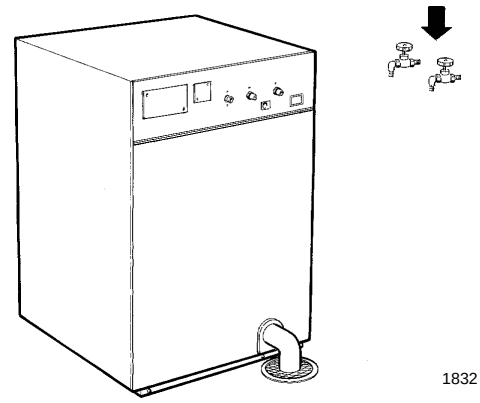
Fig. 12

- Water inlets are labelled for hot and cold water connection.
- Flush the water system thoroughly and check that the filter at the machine inlet is fitted correctly.

Fig. 13

- Connect the machine to the water mains with 3/4" reinforced rubber hosing not to exceed 6 ft in length. Hang the hosing in a large loop. Do not use rigid piping.

11



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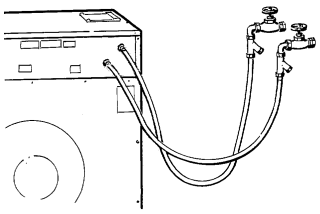
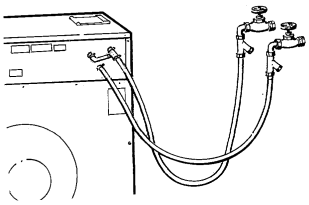
W 75, W105, W125



W 185



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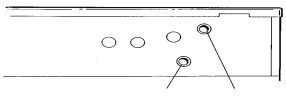
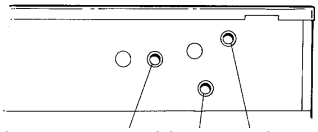
W 75, W105, W125



hot water cold water

1846

W 185



hot water cold water hot water
(to detergent supply box)

1844

How to size water supply piping for Wascomat coin laundries

1. Calculate the total number of gallons of water that would be needed if all present (and future) washers were to fill at the same time. Assume the W75 (18-lb.) uses 7 gallons per fill; W105 (25-lb.) uses 10 gallons per fill; W125 (35-lb.) uses 14 gallons per fill, W185 (80-lb.) uses 20 gallons per fill; and W244 (75-lb.) uses 30 gallons per fill. If water pipe runs of 70 feet or longer are required, multiply by 1.25 to compensate for pipe friction which reduces flow rates.
2. Using the Flow Chart below and knowing the water pressure in the water main at your store, select a pipe diameter that has a gallons per minute (gpm) flow rate the same or higher than the total calculated above. The hot water line and the cold water line supplying the washers must each be this size diameter, since many fills are all hot or all cold. This will assure fill times of approximately 1 minute and normal cycle times. Wascomat washers are designed to operate at 25–85 PSI Call your local water utility company if you do not know the water pressure in your water main.

GALLONS PER MINUTE FLOW CHART

Pipe internal Diameter, Inches	Water pressure from the water main 25 psi	40 psi	60 psi	80 psi
1/2	21 gpm	27 gpm	33 gpm	37 gpm
3/4	36	46	56	64
1	63	85	104	120
1-1/4	112	148	181	208
1-1/2	160	210	257	297
1-3/4	209	273	334	385
2	257	335	410	473
2-1/2	419	548	670	772
3	580	760	930	1070
3-1/2	650	840	1025	1185
4	720	920	1120	1300
5	1500	1960	2400	2770
6	1930	2530	3100	3580

3. The water line from the laundry to the water main in the street must carry double the total gallons capacity calculated in paragraph 1. Select the correct diameter from the Flow Chart. (You will note from the chart that two 2" pipes do not equal the flow rate of a 4 inch pipe; two 1" pipes do not equal the flow rate of a 2 inch pipe, etc... Use the correct gpm flow rates!)

Drain connection

Fig. 14 Connect a 3" (75 mm) flexible hose to the drain outlet of the machine.

The drain hose must not have sharp bends and must slope from the machine to assure proper drainage. The outlet must open freely to the main drains.

Do not reduce the size of the drain connection from the machine to the waste line.

Start-up and safety checklist

Before initial start-up of a Wascomat washer-extractor, the following safety checks must be performed:

Fig. 15
- Make sure the machine is properly bolted to the floor.

Fig. 16
- Make sure that all electrical and plumbing connections have been made in accordance with applicable local codes.
- Use only flexible water fill and drain hoses of the proper length to avoid sags and kinks.
- Make sure the machine is properly grounded electrically.

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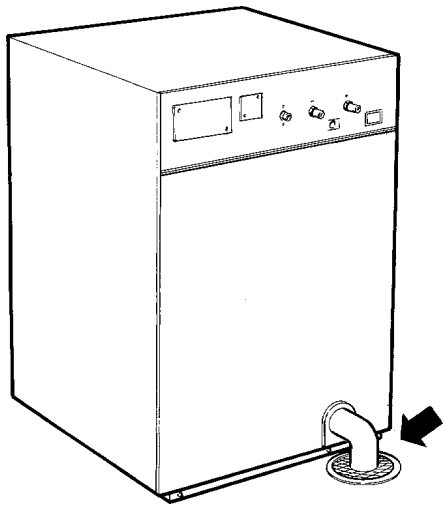

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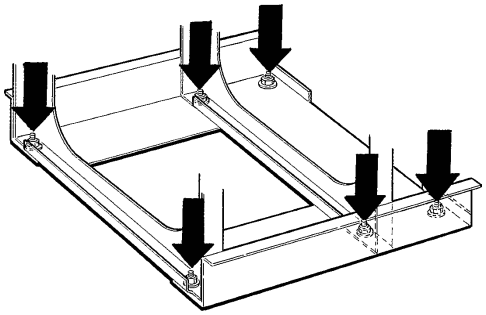

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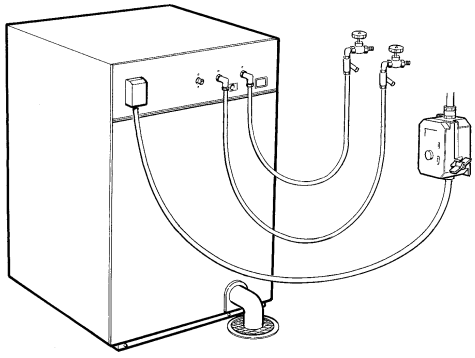

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Before the machine is operated, the door safety interlock must be checked for proper operation as follows:

Fig. 17

- When washer loading door is open, the machine must not start. Verify this by attempting to start washer with door open (see section ”Procedure”).

Fig. 18

- When washer is in operation, the loading door is locked and cannot be opened. Verify this by attempting to open the loading door when the machine is operating. If necessary, consult this manual for proper operation of the door lock and door safety interlock or call a qualified serviceman.

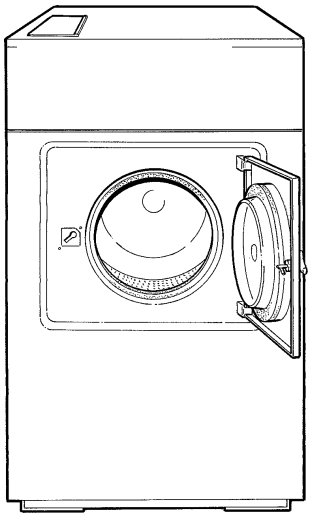
IMPORTANT:

Door safety interlock must be checked <u>daily</u> in accordance with above procedure.

WARNING:

Before servicing Wascomat equipment, disconnect electrical power.

17



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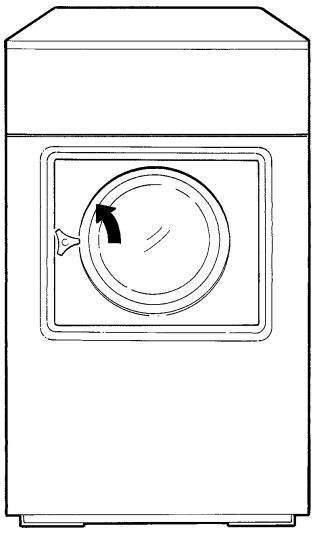

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Function control check-out list

In the machine cylinder, you will find the warranty registration card, a copy of the warranty policy, the bolt hole template and other pertinent materia. The warranty card should be completed and sent to Wascomat. All other items should be placed in a safe place for future reference.

The machine should be cleaned when the installation is completed, and checked out as detailed below without loading the machine with fabrics:

1. Check the incoming power for proper voltage, phase and cycles.
2. Open manual shut-off valves to the machine.
3. Turn on electric power.
4. Check the function of the door safety interlock as detailed on page 10 of this manual.

Fig. (19) 5. Select the HOT program and start the machine.

6. Run through a complete cycle, checking for water temperature, drain operation and extract direction.

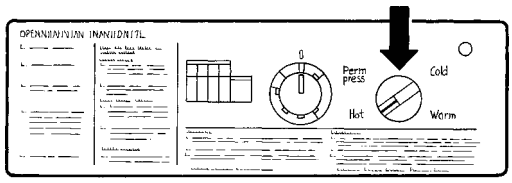
Fig. (20) 7. When the program is in the Soak cycle, hot and cold water should be entering the machine. In the Wash cycle only hot water should enter.

Fig. (21) 8. If cold water comes in, the hoses are improperly connected. Reverse hot and cold water hoses.

Fig. (22) 9. Machine must spin in a counter-clockwise direction, as seen from the front, during extraction. If it does not, reverse lines L1 and L3.

> **NOTE**
>
> **All machines are factory tested prior to shipment. Occasionally, some residual water may be found when the machine is installed.**

19



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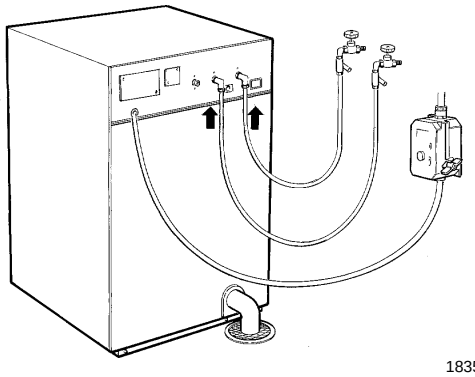

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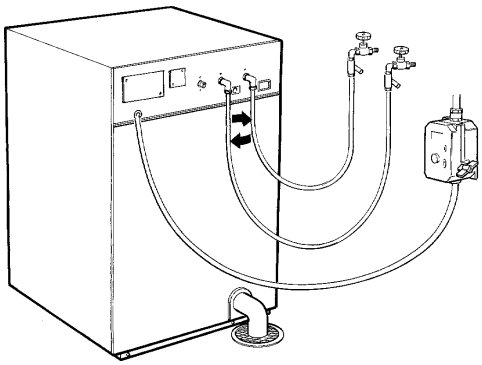

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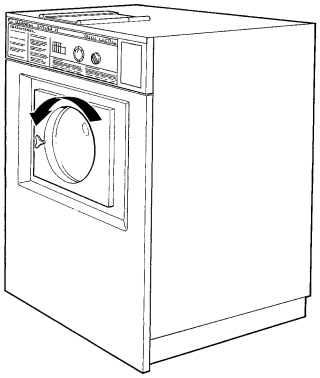

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Safety rules

- **This machine is designed for water washing only.**
- **All installation operations are to be carried out by qualified personnel. Licensed personnel are necessary for all electric power wiring.**
- **The interlock of the door must be checked daily for proper operation and must not be bypassed.**
- **All seepage in the system, due to faulty gaskets etc., must be repaired immediately.**
- **All service personnel must be fully familiar with the operating manual before attempting any repair or maintenance of the machine.**
- **This machine must not be sprayed with water, otherwise short circuiting may occur.**
- **This machine must not be used by children.**
- **Fabrics softener with volatile or inflammable fluids are not to be used in the machine.**

General

The door, cycle indicator, coin meter or manual start switches, control light and program-selection knob are located at the front of the machine.

All control and indicating components, i.e. relays, level control, cycle timer, etc are assembled under the top cover, easily accessible from the top of the machine for simplified servicing.

Main units

Fig. 23

1 Program-selector - rotary switch for choice of different wash programs.

2 Door - with automatic locking device which remains locked until the cycle is completed and the drum has stopped rotating.

3 Detergent supply box - three compartments for automatic injection of powdered detergents and fabric softener.

4 Inner cylinder - of stainless steel supported at the rear by two ballraces.

5 Outer drum - of stainless steel (18/8) securely attached to the frame.

6 Wash and extract motor - for reversing wash action and high speed spin action.

7 Hot and cold water valves - program and level controlled solenoid valves for filling with water, and for flushdown of automatic detergent dispenser.

8 Drain valve - timer controlled for draining the machine of water.

9 Siphon breaker - to prevent water in the machine from re-entering the water supply system.

10 Control unit - plug-in type for time and temperature control of the different wash cycles.

11. Coin-meter or manual start switches.

Machine construction

Outer shell

Fig. 23 The outer shell is made of heavy gauge surgical steel and is attached to a heavy duty, rigid head casting (back gable).

The whole assembly is mounted on a heavy gauge fabricated steel base, galvanized for long life and corrosion resistance.

Panels

The machines are equipped with a top panel made of stainless steel. The front panel is available in different colors or in stainless steel. The colored panels are made of phosphatized steel plate. For servicing purposes, the panels can easily be removed.

Inner cylinder

The inner cylinder is made of perforated surgical stainless steel. It is equipped with three lifting ribs and has highly-polished side sheets and back with maximum embossed perforated area to assure high flow of water and supplies through fabrics.

Scientifically correct ratio of cylinder diameter and depth assures maximum washing action.

The shaft is electrically welded to the reinforced back of the cylinder. A specially designed chrome-plated sleeve bushing protects the seals from wear.

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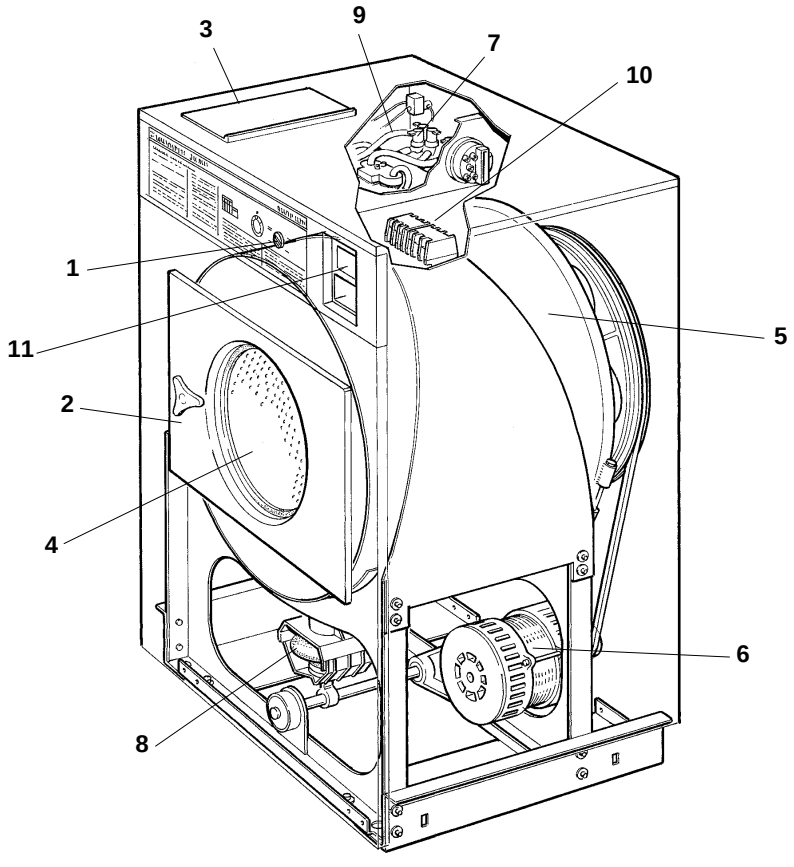

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Back gable and bearing

Fig. 24

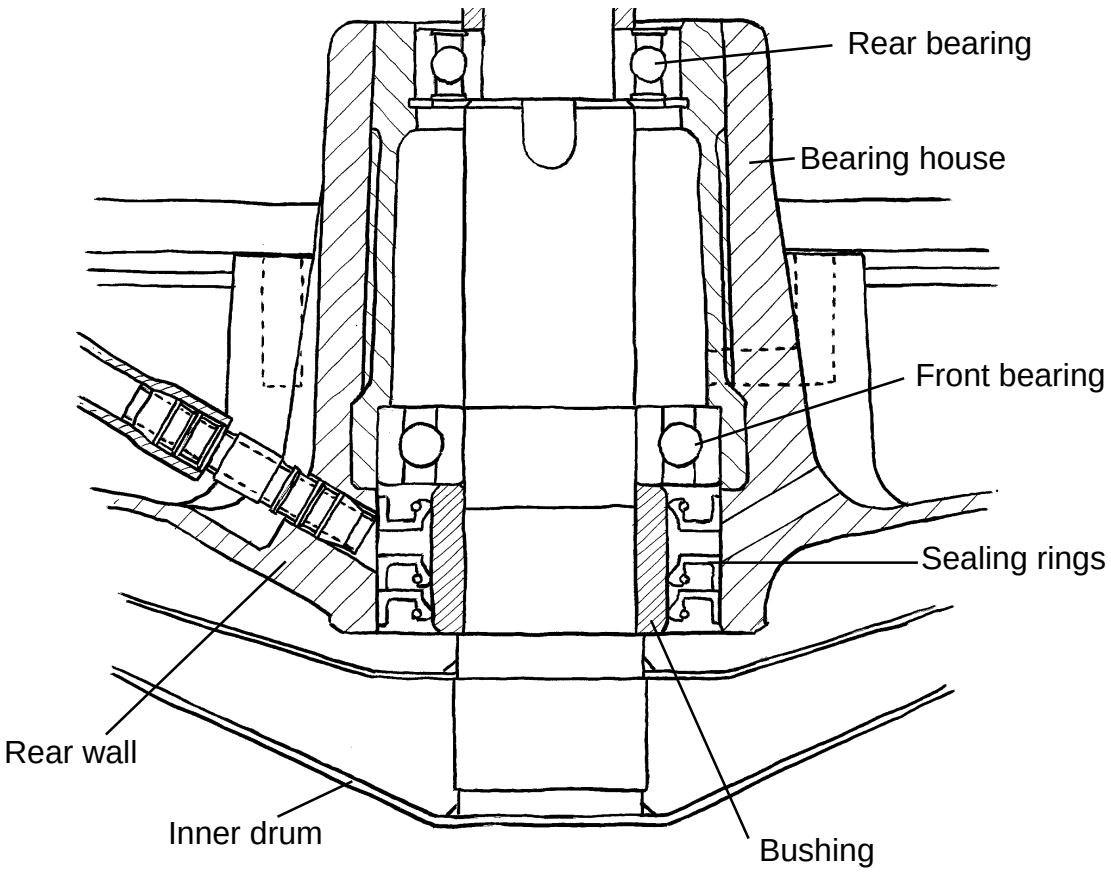
The back gable and the bearing trunnion housing are constructed of a webbed heavy casting for extra rigidity. There are three neoprene seals to protect from filtration of water. The sleeve bearings are water protected. An intermediate safety outlet provides an escapement for any possible condensation.

The seals are mounted on a chrome-plated, specially hardened sleeve bushing that is mounted on the drive shaft to prevent wear of the seals and shaft. The main bearing is fitted machine-tight into the bearing trunnion housing. A C-clamp is placed on the shaft to prevent the cylinder from moving in and out.

The extension of the bearing trunnion housing supports the rear bearing holding the shaft. The bearings are permanently lubricated and need no maintenance.

24

W 75



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Door, description

Fig. 25 The door consists of a backing frame (1), door (2), glass (3) and door gasket (4). The backing frame and door are both made of enameled aluminium. The backing frame is bolted directly to the outer shell of the washing machine.The door hinges are fastened on the outside of the backing frame and the door lock (5) on the inside. The heat-hardened glass is mounted in the door using a special rubber seal which also acts as a gasket between the door and the washing machine's outer shell when the door is closed.

Door lock, description

Fig. 26 The door lock consists of a circuit board (1) with a connector. Mounted on the board are the lock plate (2), against which the locking bolt turns to lock the door, and a microswitch (3) which closes when the locking bolt has locked the door.

There is also a locking device on the circuit board which acts to lock the locking bolt in place when the machine starts up.

The locking device consists of a double-acting solenoid (4), a delay unit (5) and the locking device itself (6) which operates sideways in blocking the locking bolt with a stud. The locking device can be affected by both the solenoid and the delay unit.

The lock operates as follows:

- When the door is shut and the locking bolt moved to the lock position, the micro switch will indicate that the door is closed.
- When the machine is started, the solenoid actuates the locking device, blocking the door lock. The locking device signals the delay unit, closing a switch in the unit. The washing machine motor will start and water enter the machine only after the delay unit receives the information that the door is locked. The bi-metallic spring in the delay unit is warmed up at the beginning of the program.
- Once the washing machine stops at the end of a cycle, the solenoid pulls back the locking stud and allows the door to open. The delay unit is spring-mounted in the locking device and is also pulled back by the solenoid. The solenoid operates for about two minutes to allow the bi-metallic spring to cool enough not to lock the door again.
- If current should disappear during a cycle, the delay unit will keep the door locked for about two minutes, ensuring that the wash water can drain out (The drain valve opens automatically when current is lost).

NOTE

Do <u>not</u> repair a faulty door lock. Allways replace the old unit with a new one, to assure proper operation of the door safety interlock.

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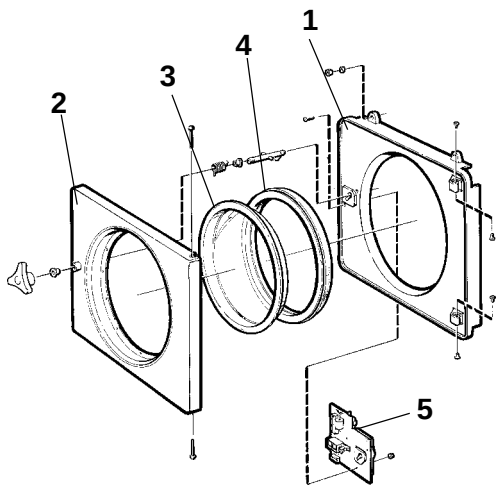

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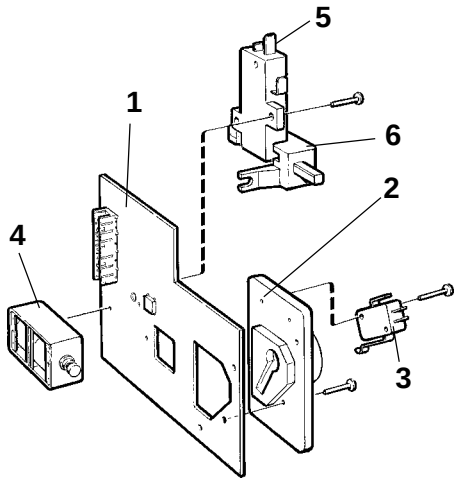

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Control unit

Fig. (27) The cycle timer(1) and rotary program selector(2) are mounted just behind the control panel.

The relays (3) and level controls (4) are located at the top of the machine, easily accessible for service, as are the motor capacitors (5) on 1-phase models..

Electrical connections to the machine are made by quick-disconnect plugs.

The timer scheme and basic circuit diagram are available at the end of this manual.

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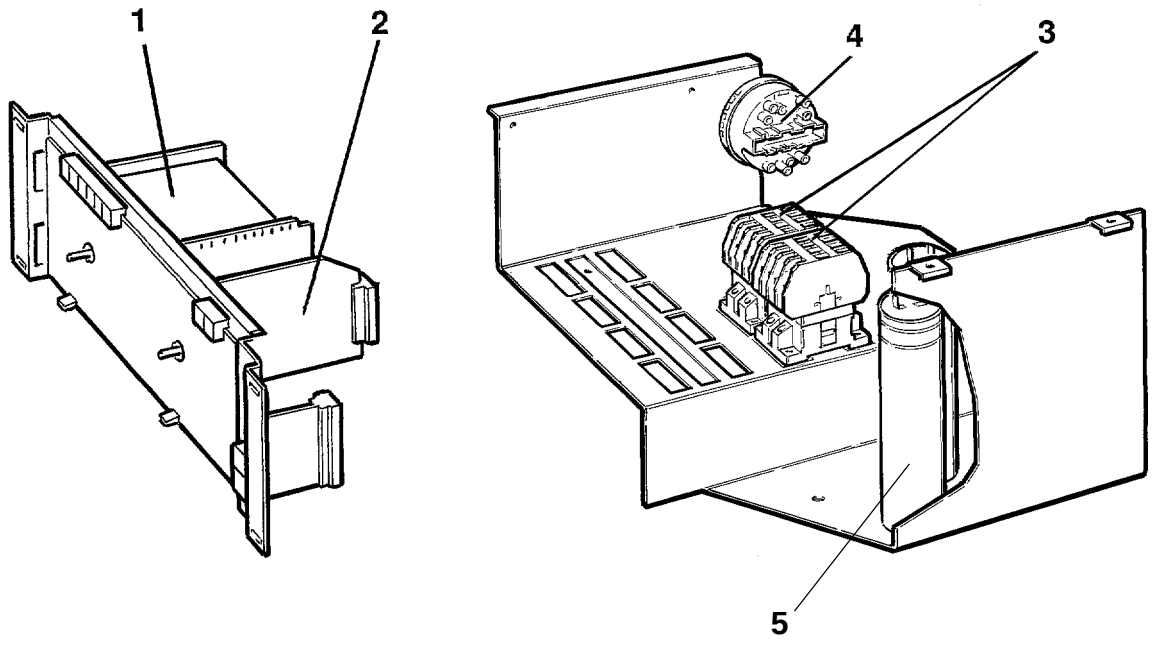

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Relays

Fig. 28 The Wascomat W models employ two relays. The relays control:

- the wash speed (1)
- the extract speed (2)

Construction

Fig. 29 The body of the relay holding the stationary contacts is made of current-resistant plastic. A solenoid and a contact bank hold the moving contacts. The contacts are spring-loaded to assure the correct contact pressure.

The relay is constructed for continous operation, whether mounted horizontally or vertically.

Screw-type terminals provide perfect connections even when one or two wires have different diameters.

Operation

When the solenoid is energized, the two halves of the magnet core are drawn together, pulling down the moving contacts, thus making or breaking the circuit. When the current cuts out, springs force the contact bank into its original position, thus closing or opening the circuits.

Trouble shooting

If the relay fails to operate despite power to the coil, turn off the power and check the solenoid by measuring the resistance across the terminals (1).

If the relay hums when power is applied, this indicates either a break in the insulator holding the moving contacts at the axle where it holds the top half of core (3), or a rusty core (4), which can be cleaned.

Make sure that the moving contact assembly moves freely. Always replace burnt or pitted contacts (2) ... do not reuse contacts.

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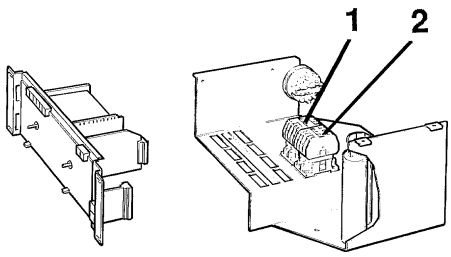

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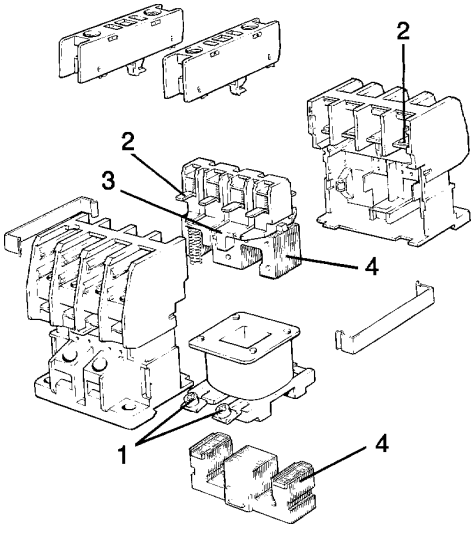

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Drive motor

Description in general

Fig. 30 The motor is mounted on an axle with rubber dampeners.

Fig. 31 The V-belt is tightened by turning the motor on the axle and locking it in place using the tensioner on the rear side of the motor. The motor and tensioner have vibration and noise dampening rubber suspensions.

Construction in general

The motor consists of stator, rotor and end-shields with ball-bearings. The stator and the rotor consist of plates, insulated from each other and welded together. The stator is provided with slots in which the 2-pole and 18-pole windings are wound. The windings are impregnated with a temperature-resistant sound-insulating resin varnish according to class B. The end-shields are die-cast. The ball bearings are permanently lubricated.

Construction of single-phase motor

Single-phase motors have an 18-pole winding (wash-speed) the same as three-phase motors, using a continuously connected capacitor, while the 2-pole winding (extract-speed) is a specially designed winding with both a continuously connected capacitor and a starting capacitor.

Function of 3-phase motor

When the stator winding is charged, a magnetic field will occur, which in turn will rotate the rotor at a fixed RPM depending upon the number of poles in the winding. The 18-pole winding gives the wash speed and the 2-pole winding the extract-speed. When operating with load, the speed deviates slightly from the synchronous (no-load) speed. This difference is called the slip and is usually expressed as a percentage of the syncronous speed. The motors will work satisfactorily at nominal voltage +10%-15%.

Function of single-phase motor

When the stator winding is charged without a capacitor, two counteracting magnetic fields are created. When a capacitor is connected, it will displace one of the two magnetic fields adding it to the other, creating a torque turning the rotor in a specific direction. The RPM is the same as for the 3-phase motor.

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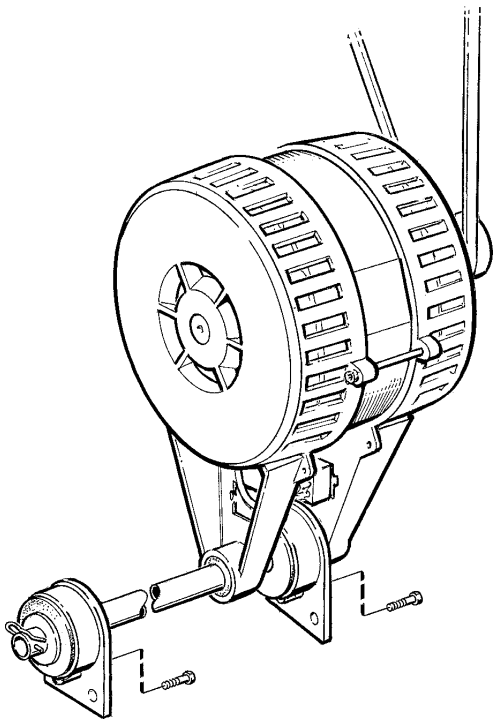

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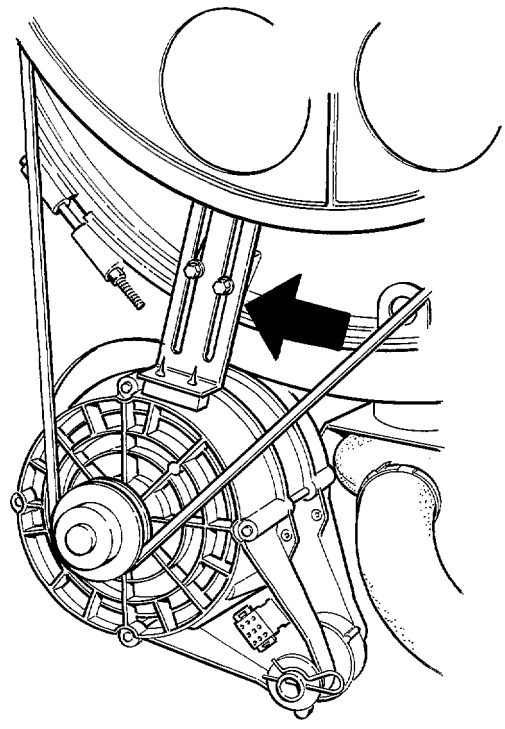

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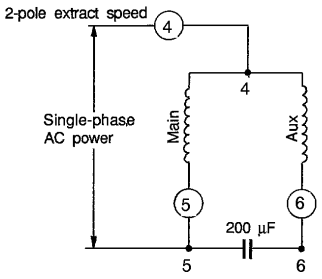
Principal wiring and points of measuring on single-phase motors.

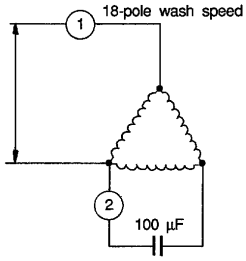
Fig. 32 The numbers at the connection points refer to the terminal numbers at the motor connector plug.

The numbers in circles indicate points of ampere measurements.

32

W75 120 V 60 Hz single-phase





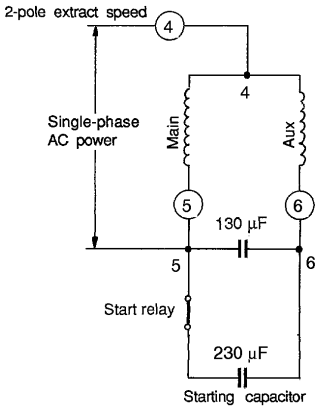
EXTRACT WINDINGS

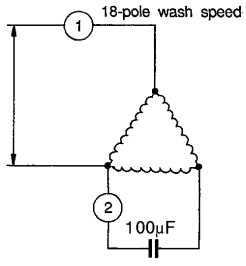
Measuring point	at full speed
4	10 A
5	7 A
6	14 A

WASH WINDINGS

Measuring point	unloaded
1	4 A
2	4.9 A

W105 120 V 60 Hz single-phase





EXTRACT WINDINGS

Measuring point	at full speed
4	5.5 A
5	2.0 A
6	6.5 A

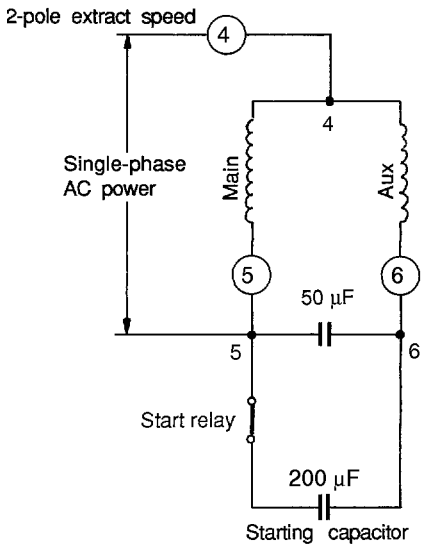
WASH WINDINGS

Measuring point	unloaded
1	3.5 A
2	5.0 A

1216

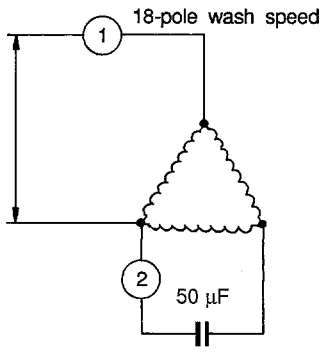
32

W125 208-240 V 60 Hz single-phase



EXTRACT WINDINGS

Measuring point	att full speed 208 V	240 V
4	3 A	4 A
5	3 A	6 A
6	6 A	7 A



WASH WINDINGS

Measuring point	unloaded 208 V	240 V
1	2.9 A	3.9 A
2	4.6 A	4.8 A

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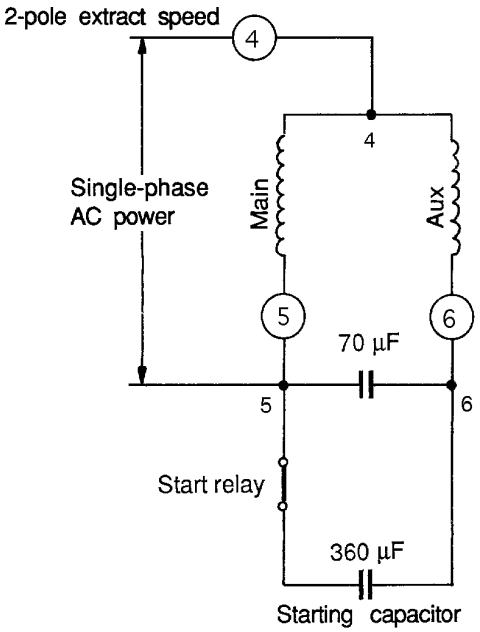
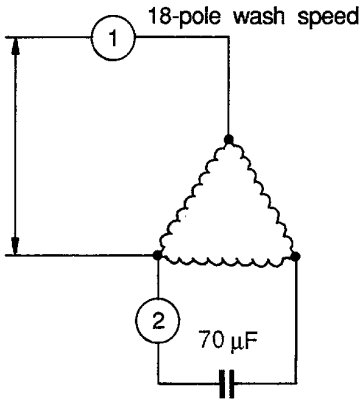
W185 208-240 V 60 Hz single-phase





EXTRACT WINDINGS

Measuring point	att full speed 208 V	240 V
①	5 A	8 A
②	5 A	12 A
③	7 A	9 A

WASH WINDINGS

Measuring point	unloaded 208 V	240 V
①	3,3 A	4,2 A
②	6,8 A	7,2 A

1791

Motor connections

Fig. (33) 1, 2 and 3: wash speed (18-pole winding).

4, 5 and 6: extract speed (2-pole winding)

7 and 9: motor overload protector.

Motor overload protector

The motor is equipped with two self-resetting, thermal overload protectors, situated one in each of the windings of the stator. The protectors are connected in series and will trip at a temperature of 120°C (248°F) (3-phase) or 130°C (266°F) (single phase). In the event the protectors fail but the motor remains otherwise undamaged, an overload protector may be mounted in the control unit of the machine. Before making such installation check to ascertain that the windings are not damaged. A burned out motor can be re-wound.

> **NOTE**
>
> **Before connecting a separate overload protector consult the local code.**

Single-phase W125 and W185 machines are also equipped with a manually set overload protector mounted on the extract relay in the control unit. This overload protector protects the motor during the start-up of the extraction.

Removing the motor

Fig. (34)

- Remove the drain valve (1) from the long shaft by pulling it straight up.
- Remove the tensioning unit (2) on the rear of the motor.
- Disconnect the connector (3) placed diagonally under the rear edge of the motor.
- Remove the two screws (4). Pull the shaft forward slightly until the guide pins pull out of the shaft brackets. Remove the motor unit.

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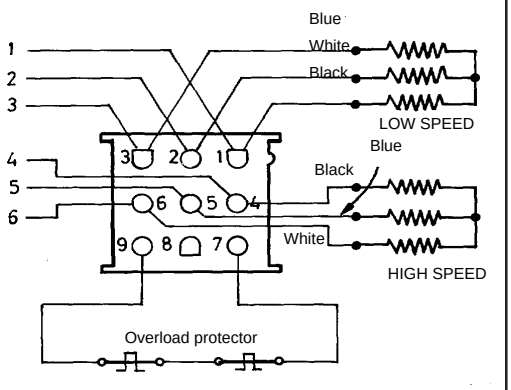

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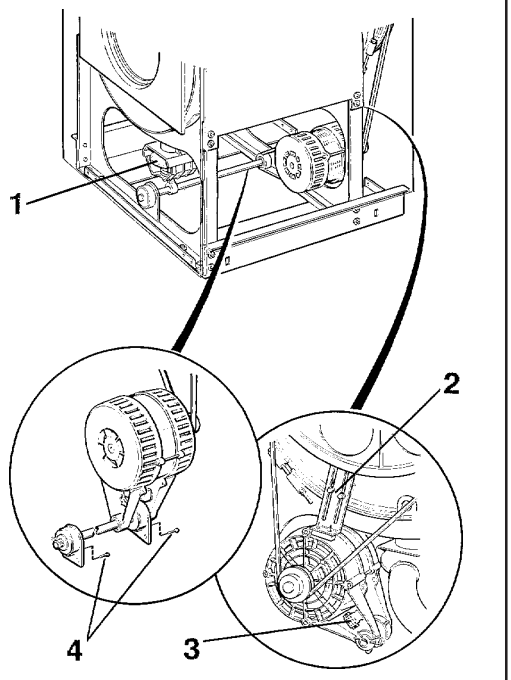

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Water level controls

Fig. 35 One pressure switch is used to control the correct water levels during various cycles of the washing program.

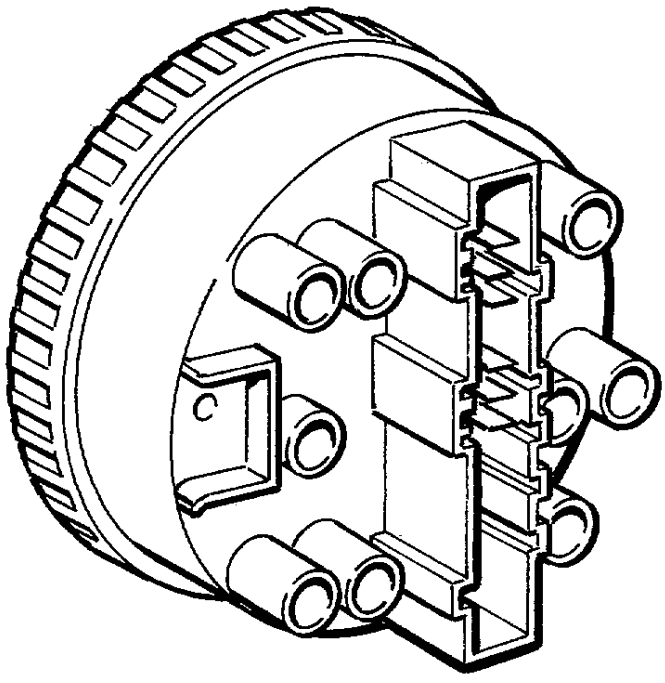
Adjustment

All pressure switches are factory-calibrated to meet specific requirements. The trip level for any one pressure switch can be changed only within narrow limits because each trip range requires a different set of springs.

Water level

As a guide for checking the level control for proper functioning, the normal level should be at the bottom of the door glass.

35



1198

Inlet valves

Construction

Fig. 36 The valve has a single-inlet with either one, two or three outlets, each with its own solenoid coil. The body is made of heat-resistant polyamid plastic and the solenoids encased in water-tight plastic.

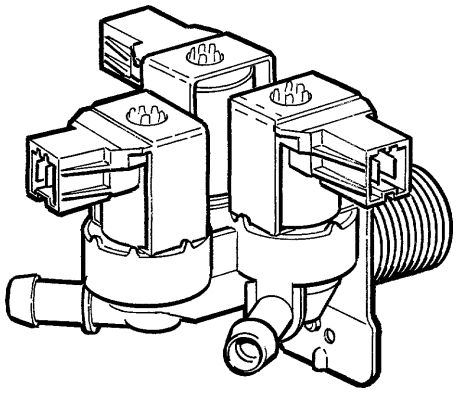
A filter screen on the inlet side prevents dirt from entering the valve. Flow restrictors can be placed at either the inlet or any of the outlets.

Operation

Fig. 37 When the solenoid is energized, the spring-loaded plunger is drawn up and the pilot valve in the center of the diaphragm open. Because of the difference in diameter between the pilot valve opening and the ventilating hole in the diaphragm, the pressure above the diaphragm drops to a point where the admission pressure below the diaphragm can lift the diaphragm, thus opening the valve.

When the current to the solenoid is cut off, the plunger spring will press the plunger against the pilot opening of the diaphragm. The pressure above the diaphragm then rises to correspond to the water inlet pressure and the pressure of the spring will close the valve.

36



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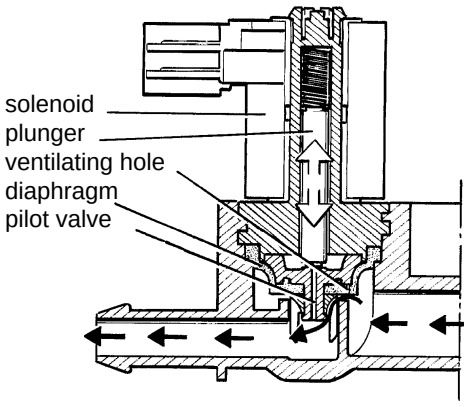

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Maintenance instructions

Limescale can block the hole in the valve diaphragm and interfere with the function of the valve.

Fig. (38) It is therefore advisable to dismantle and clean the valve at certain regular intervals. The frequency depends on operating conditions and the level of contamination in the water.

Trouble shooting

If the valve does not open

- Check that power is supplied to the coil.
- Check the coil with an instrument to determine whether there is a break or a short circuit.
- Dismantle the valve (see below) and check the openings in the valve diaphragm.
- Check the inlet strainer and clean as required.
- Undo the coil and clean the surfaces of the magnetic core.

If the valve does not close

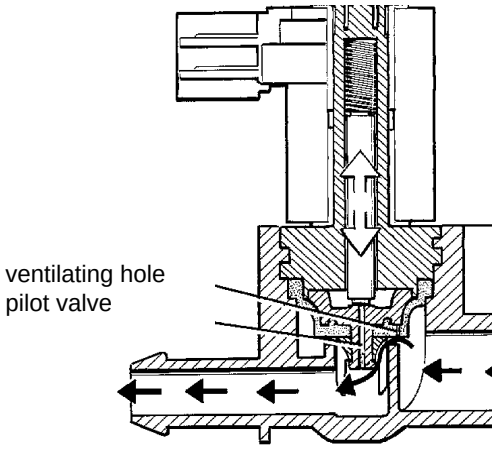
- Check that the coil is not live. The valve is normally closed when the magnet is not energised.
- Check the return spring.
- Check the diaphragm (pilot pressure opening).

Dismantling the valve

Fig. (39)
- Pull the coil straight upwards. Use a screwdriver if necessary to carefully undo the coil.

Fig. (40)
- Use the tool supplied with the machine (attached to one of the hoses when the machine is delivered) to open the valve housing. Slide the tool over the protruding plastic sleeve to that the pegs on the tool engage the corresponding sockets in the valve housing.
- Use a spanner or a pair of pliers and unscrew the upper part of the valve housing.

38



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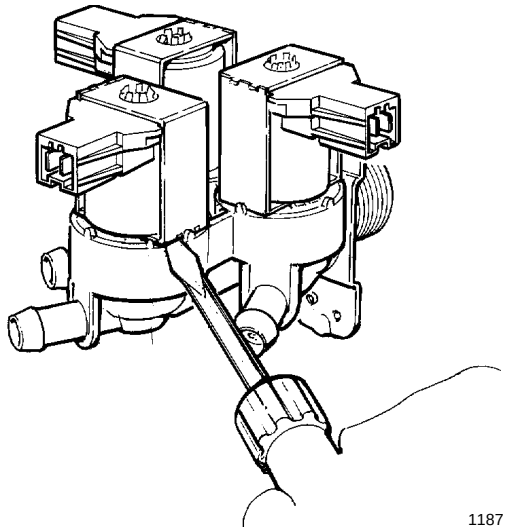

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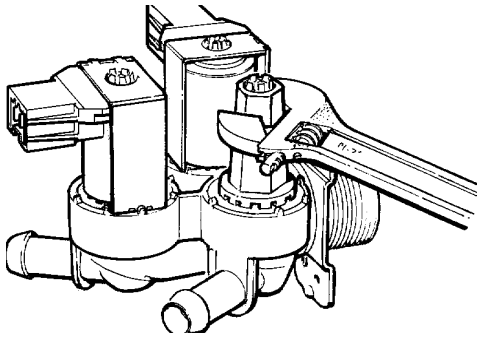

1181

Inlet valve for W75-W185

Fig. 41 The water inlets have brass bodies with larger cross section of the outlet in order to achieve a shorter filling time for the machine.

Construction

Fig. 42 The valve housing is made of pressed brass. The spring-loaded plunger is made of stainless steel and located at its lower end.

Operation

The valve is automatically operated by means of a rubber diaphragm and a pilot valve in exactly the same way as the supply injector valve.
NOTE: To strip, clean, re-assemble and troubleshoot the inlet valve, follow the instructions outlined for the supply injector valve.

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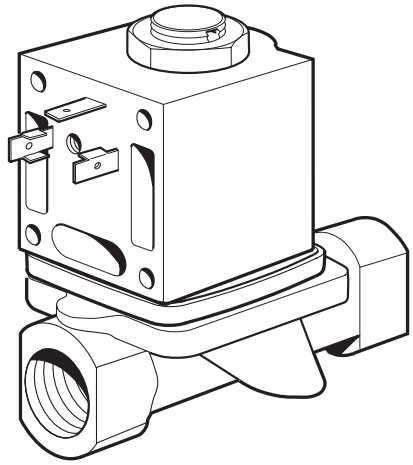

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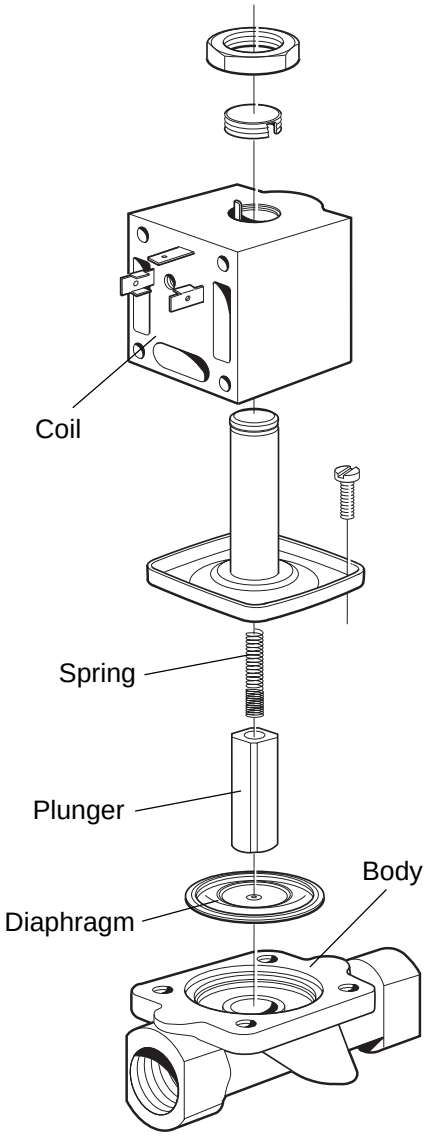


3961

Soap supply box

Fig. 43 The three-compartment soap supply box is located at the top of the machine. Viewed from the front, the compartments marked with figures 1, 2 and 3 are used as follows:

Compartment 1

This compartment is used for adding detergent to the wash at the start of the Soak cycle.

Compartment 2

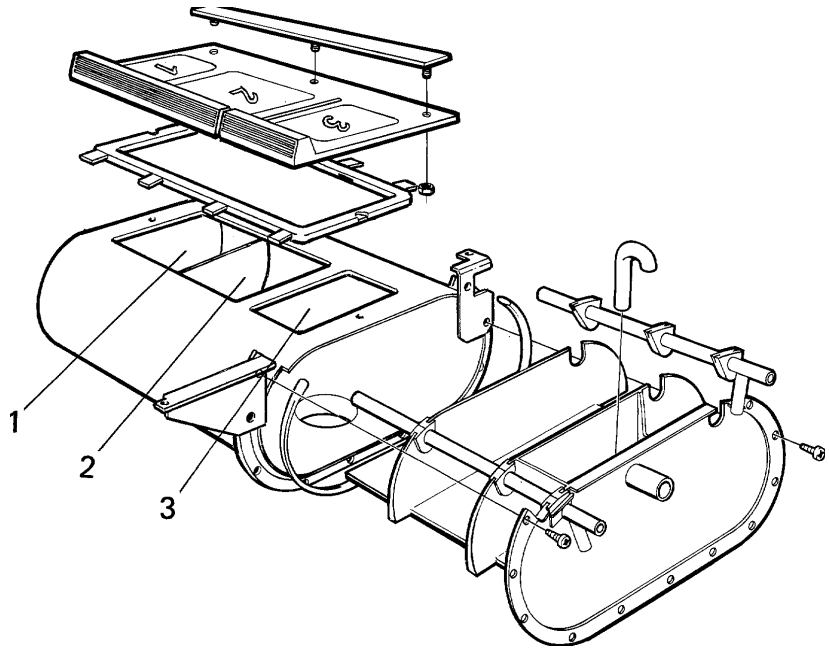
This compartment is used for adding supplies to the wash at the beginning of the Wash cycle.

The insert is used to help prevent oversudsing.

Compartment 3

The small compartment is used for adding liquid fabric softener, which is flushed down by a siphon action at the start of the third rinse.

43



1182

Drain valve

Description

Fig. 44 The drain valve is operated by using the pressure in the cold water intake. A tube (1) is connected between the cold water intake and a solenoid valve (2). When the solenoid valve is activated, it opens and allows water to flow into the feeder tube (3). The water presses up a piston (4), which uses the pressure lid (5) to close the drain valve rubber membrane. When the solenoid valve cuts out, the water presure and the springs (7) on the lid push the piston back, allowing the water to pass the solenoid valve and drain out via the return tube (8).

Trouble shooting

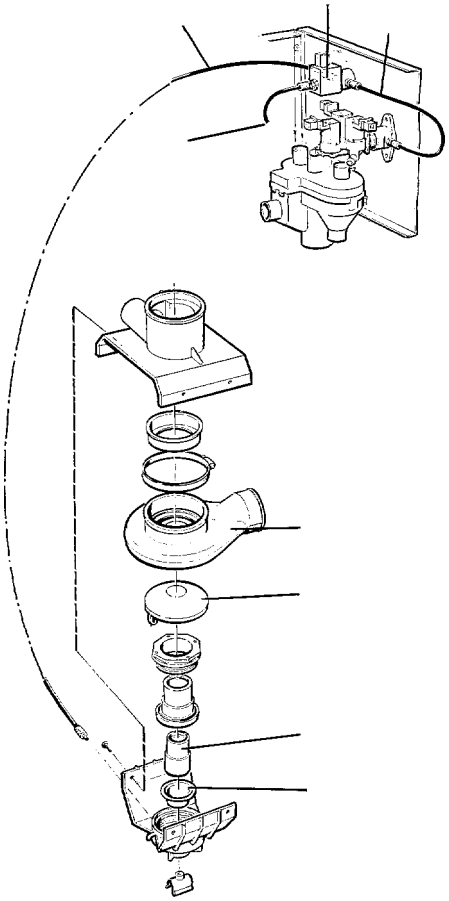
If the drain valve doesn't close:

- Check that the solenoid valve (2) receives electricity.
- Check that the solenoid valve and the tubes are clear by:
  - removing the drain hose (3).
  - Check that water exits the hose when the valve is activated.
- Check that the diaphragm (9) is undamaged.

If the drain valve doesn't open:

- Check that the return tube (8) is open.
- Check that the piston (4) doesn't seize.

44



1159

Procedure for use

Preparations

Sort the laundry according to the categories listed on the control panel. Check washing instructions on garment tags.

Empty pockets and close zippers.

Open door, put laundry in the machine and close door.

Washing

Fig. 45 Turn control knob to desired wash program.

Add detergent and fabric softener in the compartments on top of the machine:

Fig. 46
- pre-wash detergent in compartment 1
- regular detergent in compartment 2
- liquid fabric softener in compartment 3

Follow dosage instructions on detergent package.

Liquid detergent can only be added at the beginning of the specific cycle.

Insert coins or tokens. When the right amount has been added the machine starts automatically.

Finishing

When the wash program is finished, open the door and take out the laundry.

Fig. 47 When necessary, clean the door gasket and detergent compartments. Wipe off the machine with a damp cloth.

Leave the door open when the machine is not in use.

Leave the machine in the condition you would expect to find it in.

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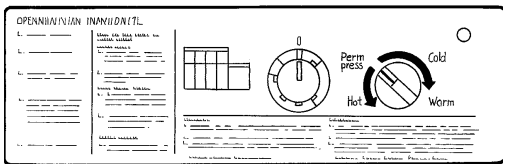

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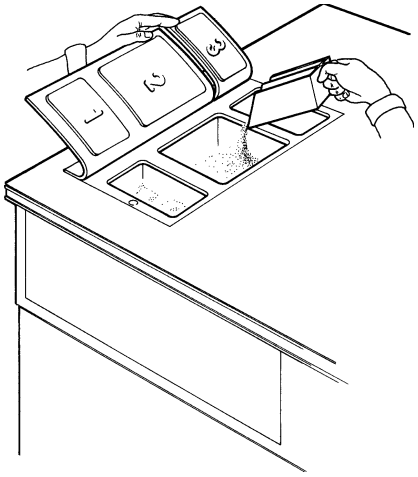

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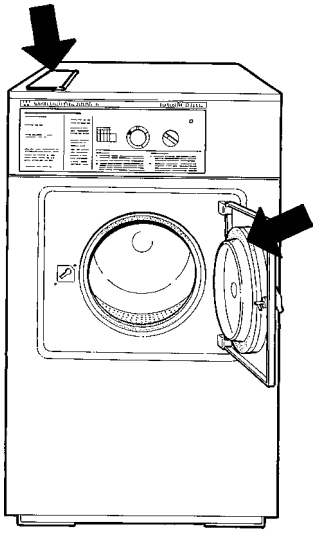

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To change the wash programs

Fig. (48) You can change the following parameters in the wash programs by adding or removing jumpers on the timer circuit board.

Optinal changes

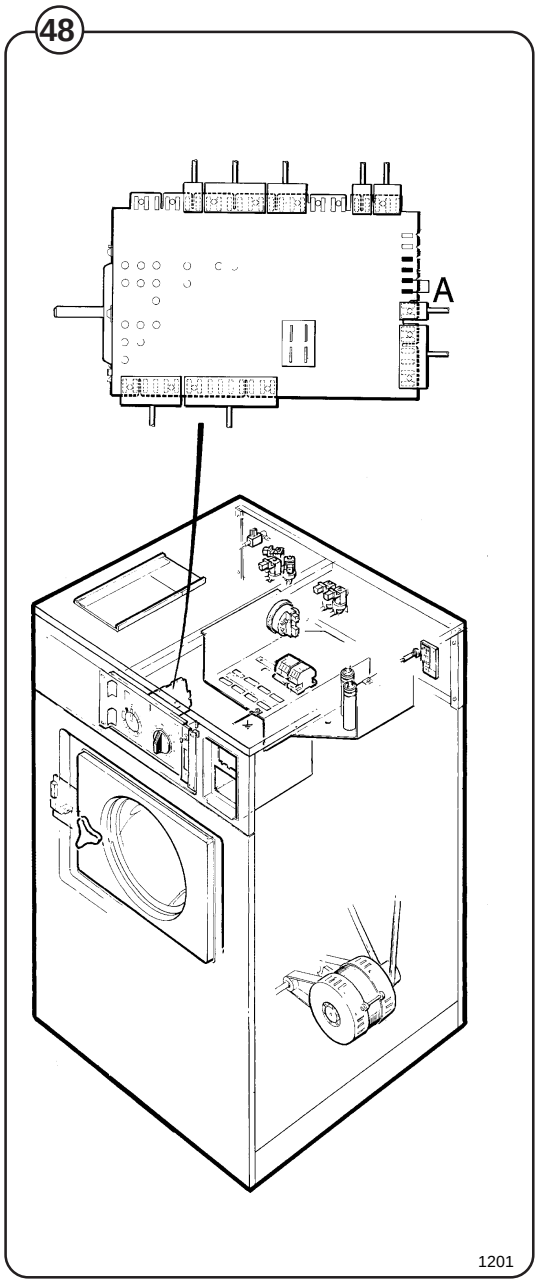
By installing optional equipment, you can reduce the wash programs:

- no prewash
- only two rinses

Fig. (48) **Water level during prewash/mainwash**
With jumper A (see figure) in place the machine fills water to the high level during prewash, mainwash and rinses.

If you remove jumper A the machine fills water to the low level during pre- and mainwash and to the high level during rinses.

Contact your local dealer for detailed information.



Wash Programs

Fig. 49 In the figure below is an overview of the four wash programs.

On the following pages you will find a more detailed description of the programs.

49

PO2 CH

	HOT			WARM			COLD GENTLE ACTION			PERM PRESS		
	Time (Min.)	Temp.	Water Level	Time (Min.)	Temp.	Water Level	Time (Min.)	Temp.	Water Level	Time (Min.)	Temp.	Water Level
Prewash	3	Warm	High	3	Warm	High	3	Cold	High	3	Warm	High
Detergent 1												
Drain	1			1			1			1		
Mainwash	5	Hot	Low	5	Warm	Low	5	Warm	Low	5	Warm	Low
Detergent 2												
Drain	1			1			1			1		
Rinse 1	1	Cold	High	1	Cold	High	1	Cold	High	1	Cold	High
Drain	1			1			1			1		
Extract	0.5			0.5			0.5			0.5		
Rinse 2	1	Cold	High	1	Cold	High	1	Cold	High	1	Cold	High
Drain	1			1			1			1		
Extract	0.5			0.5			0.5			0.5		
Rinse 3	2	Cold	High	2	Cold	High	2	Cold	High	2	Cold	High
Detergent 3												
Drain	1			1			1			1		
Extract	4			4			4			1		
Shake-out	1.5			1.5			1.5			1.5		
Total time (water fill time not included)		24.5			24.5			24.5			21.5	

1202

Program group 1

Wash program, Hot

Fig. (50) After the machine has started and the door automatically locked, the drain valve will close and the hot and cold water valves will open to fill the machine with mixed hot and cold water to the level determined by the level control.

When this level is reached, both water valves will close. During filling and then through the wash program the drum has a reversing rotation.

At the end of the soak, the drain valve will open, whereafter hot water will fill to the level determined by the level control. At the same time detergent from compartment 2 is mixed with the incoming hot water.

The water level controlled machine will now wash the fabrics for 5 minutes. The machine is then emptied.

Cold water is filled to the high level for the first rinse which lasts one minute, followed by spin extraction for 30 seconds. After the extraction comes the second rinse in cold water, ending with spin extraction, whereafter the third rinse is started. Fabric softener is automatically admitted during the third rinse. The fabrics are rinsed in cold water for two minutes followed by a spin extraction of four minutes duration. Finally there is a shake out for one and a half minutes.

50

	HOT		
	Time (Min.)	Temp.	Water Level
Prewash Detergent 1 Drain	3 1	Warm	High
Mainwash Detergent 2 Drain	5 1	Hot	Low
Rinse 1 Drain Extract	1 1 0.5	Cold	High
Rinse 2 Drain Extract	1 1 0.5	Cold	High
Rinse 3 Detergent 3 Drain Extract	2 1 4	Cold	High
Shake-out	1.5		
Total time (water fill time not included)		24.5	

1203

Wash Program, Warm

Fig. 51

On starting the machine, the door will automatically be locked, and the pre-wash carried out as previously described, whereafter the main wash is started.

As the main wash is started, the drain valve closes, detergent is admitted and mixed hot and cold water is filled to the level determined by the level control.

On reaching this level, the water valves are closed.

The water level controlled machine will now wash the fabrics for six minutes. The machine is then emptied.

Cold water is filled for the first rinse which lasts one minute, followed by spin extraction for 30 seconds.

After this extraction comes the second rinse in cold water ending with spin extraction, whereafter the third rinse is started. Fabric softener is automatically admitted during the third rinse. The fabrics are rinsed with cold water for two minutes followed by a spin extraction of four minutes duration. Finally there is a shake out forone and a half minutes.

51

	WARM		
	Time (Min.)	Temp.	Water Level
Prewash	3	Warm	High
Detergent 1			
Drain	1		
Mainwash	5	Warm	Low
Detergent 2			
Drain	1		
Rinse 1	1	Cold	High
Drain	1		
Extract	0.5		
Rinse 2	1	Cold	High
Drain	1		
Extract	0.5		
Rinse 3	2	Cold	High
Detergent 3			
Drain	1		
Extract	4		
Shake-out	1.5		
Total time (water fill time not included)		24.5	

1204

Wash Program, Cold (with gentle action)

Fig. 52

On starting the machine, the door will automatically be locked, the drain valve closed, the cold water valve opened and the pre-wash carried out as previously described, whereafter the main wash is started.

As the main wash is started, the drain valve closes, detergent is admitted and cold and hot water are filled to the level determined by the level control.

On reaching this level, water walves are closed.

The water level controlled machine will now wash the fabrics for six minutes. The machine is then emptied.

Cold water is filled for the first rinse which lasts one minute, followed by spin extraction for 30 seconds.

After this extraction comes the second rinse in cold water concluded with spin extraction, whereafter the third rinse is started.

Fabric softener is automatically admitted during the third rinse. The fabrics are rinsed with cold water for two minutes followed by a spin extraction of four minutes duration. Finally there is a shake out forone and a half minutes.

52

	COLD		
	Time (Min.)	Temp.	Water Level
Prewash	3	Cold	High
Detergent 1			
Drain	1		
Mainwash	5	Warm	Low
Detergent 2			
Drain	1		
Rinse 1	1	Cold	High
Drain	1		
Extract	0.5		
Rinse 2	1	Cold	High
Drain	1		
Extract	0.5		
Rinse 3	2	Cold	High
Detergent 3			
Drain	1		
Extract	4		
Shake-out	1.5		
Total time (water fill time not included)		24.5	

1205

Wash Program, Permanent Press

Fig. 53

On starting the machine, the door will automatically be locked, the drain valve closed, the hot and cold water valves opened and the pre-wash will be carried out as previously described, whereafter the main wash is started.

As the main wash is started, the drain valve closes, detergent is admitted and mixed hot and cold water is filled to the level determined by the level control.

On reaching this level, the water valves are closed and the wash motor starts its reversing rotation.

The water level controlled machine will now wash the fabrics for six minutes. The machine is then emptied.

Cold water is filled for the first rinse which lasts one minute, followed by spin extraction for 30 seconds.

Fabric softener is automatically admitted during the third rinse. The fabrics are rinsed with cold water for two minutes followed by a spin extraction of one minutes duration. Finally there is a shake out forone and a half minutes.

53

	PERM PRESS		
	Time (Min.)	Temp.	Water Level
Prewash	3	Warm	High
Detergent 1			
Drain	1		
Mainwash	5	Warm	Low
Detergent 2			
Drain	1		
Rinse 1	1	Cold	High
Drain	1		
Extract	0.5		
Rinse 2	1	Cold	High
Drain	1		
Extract	0.5		
Rinse 3	2	Cold	High
Detergent 3			
Drain	1		
Extract	1		
Shake-out	1.5		
Total time (water fill time not included)		21.5	

1206

Maintenance

Preventive maintenance has been reduced to a minimum by the careful design of reliable components and material.

However, the following measures should be taken at regular intervals and in proportion to the hours of service.

IMPORTANT!

Make certain that all electrical power to the machine is shut off before removing top or rear panels.

Daily

- Check the door lock and interlock before starting operations.
- The soap supply box should be cleaned at the end of each working day as follows:
  - Use a spatula to scrape loose any detergent which may have stuck on the inside of the dispenser.
  - Flush the loosened detergent with warm water.
  - Wipe dry and leave lid open.

Fig. 54

- Check that the drain valve does not leak and that it opens properly.
- Check that the door does not leak. Clean residual detergent and foreign matter from the door gasket.
- Wipe the outside of the machine.
- When the machine is not in use, leave door slightly open to allow moisture to evaporate.

Weekly

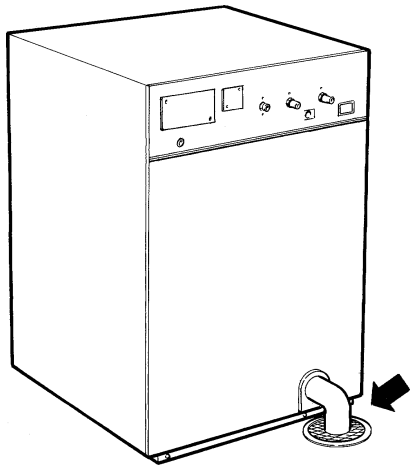
- Remove the hose from the drain connection and clean the inside of the drain valve.

Every three months

Fig. 55

- Remove the rear panel of the machine and check that the V-belt of the wash motor is undamaged and correctly tensioned.
- Check that all tubing, piping and connections are free from leaks.
- Wipe and clean the inside of the machine, making sure that the control components are protected from moisture and dirt during the cleaning operation.

54



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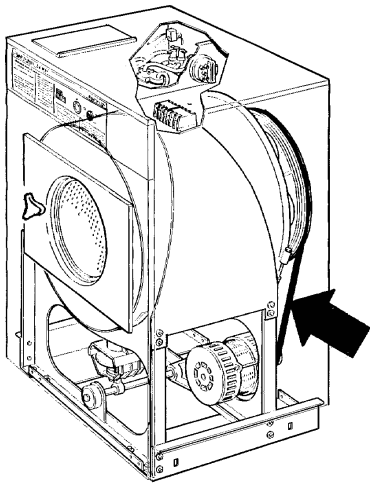


1207

Trouble shooting

If the machine does not start

Fig. 56

A Check circuit breaker in the power feed line to the machine.

B Check the door safety switches.

C Check the glass cartridge fuse.

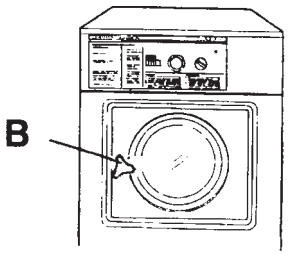
If water does not drain

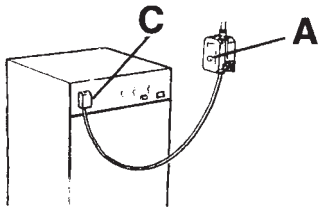
Fig. 57

A Check the drain valve and drain solenoid for proper operation.

B Disconnect the drain hose connected to drain line. If full flow of water comes out, the problem is in the main waste line. If water flow is slow, the problem is the accumulation of foreign materials between the drain valve and shell outlet of machine. Clean valve body of any foreign objects found.

56





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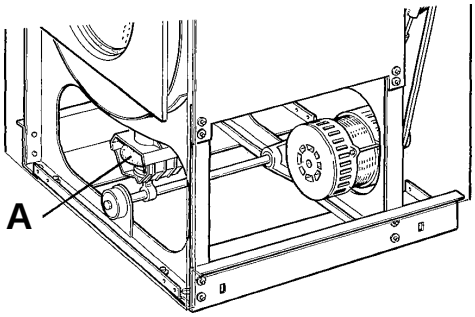
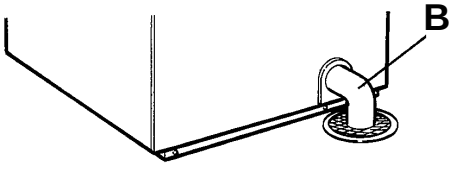




1209

If machine does not extract

Fig. 58

A Check extract relay and relay coil for proper operation.

If motor does not operate at wash speed

Fig. 59

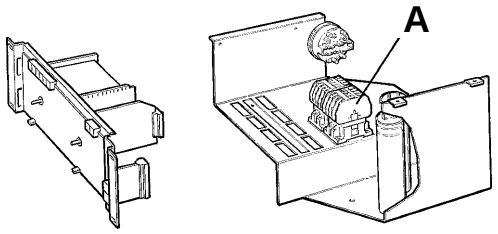
A Check wash relay.

B Check normally-closed contact of extract relay.

C Check motor and V-belt.

D Review procedures outlined under section ”If machine does not start” above.

58



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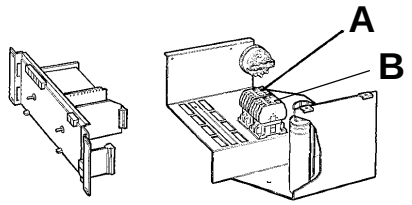

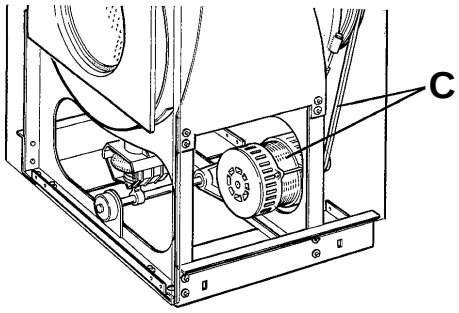

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If machine runs slowly on wash speed or there is a slapping or thumping noise.

Fig. 60 A Replace V-belts

If a metallic noise can be heard at rear of machine

Fig. 61 A Tighten pulley on motor shaft

If the door is leaking

Fig. 62 A Check the door gasket. If the gasket is in good condition, install a 4-7 mm rubber hose seal around the entire gasket, using the slits provided.

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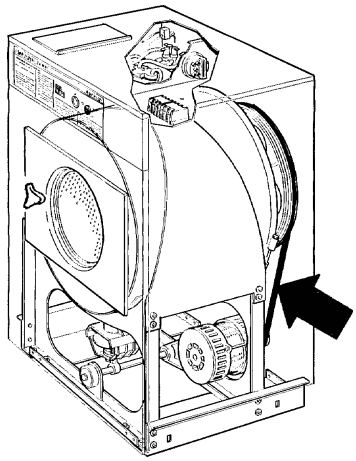

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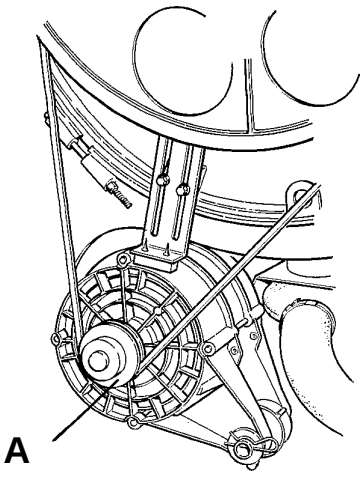

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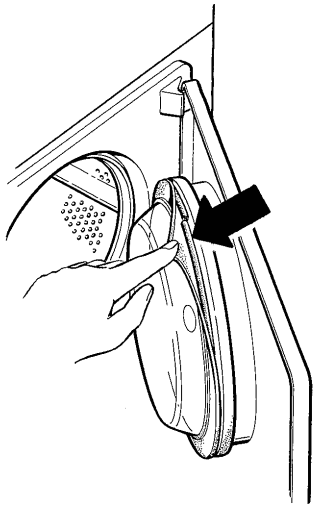

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If there is a leaking around the glass

Fig. 63

A Replace door gasket if worn.

If water does not enter the machine.

Fig. 64

A Check the valve coils on inlet valves.

B Check wires leading to valve coils.

C Be sure manual shut-off valves are in open position.

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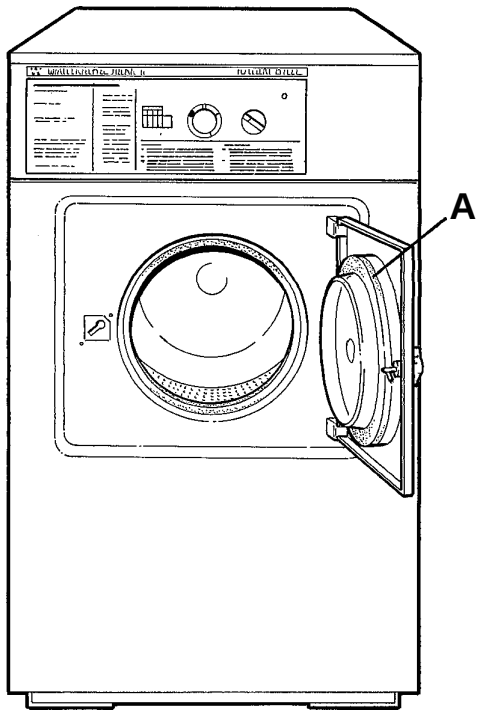

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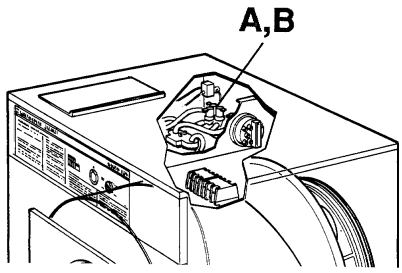

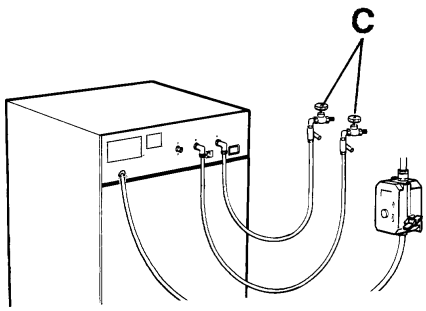

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If water continues to fill without stopping.

Fig. 65

A Check hose attached to level control unit.

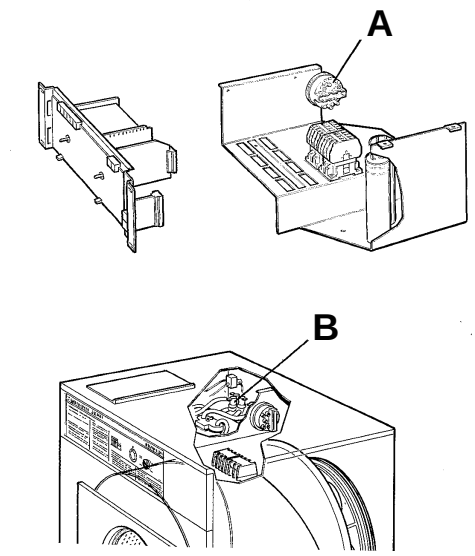
B Check inlet valves for dirt underneath the valve diaphragm. To localize, shut off power. If water continues to flow, inlet valves have foreign material in them and should be thoroughly cleaned.

If water continues to flow without filling machine.

Fig. 66

A Check seating of drain valve.

65



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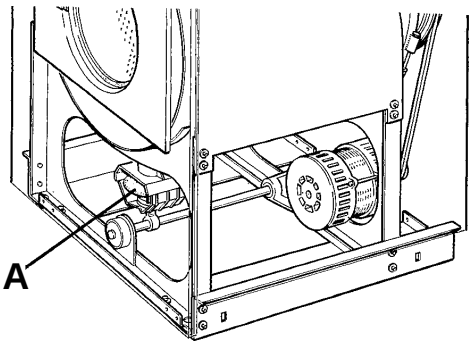

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If machine vibrates excessively.

Fig. Tighten mounting bolts.
67